# **MSDS**

# **MATERIAL SAFETY DATA SHEET**



# 24 Hour Emergency Telephone Number CHEMTREC 1-800-424-9300 SUNBELT CHEMICALS 71 HARGROVE GRADE PALM COAST, FLORIDA 32137

All non-emergency questions should be directed to Customer Service (1-386-446-4595) for assistance.

# 10% SODIUM HYPOCHLORITE SOLUTION

#### 1. Product Identification

Synonyms: chlorinating solution, swimming pool chlorine, a solution of chlorine in alkaline water.

CAS Number: 7681-52-9

**Product Name: SMART Chlorinating Solution** 

Part Number: 120 Supplier GLN: 00179264004142 **UPC Code:** 017926001202 **GTIN:** 00179260012020

### 2. Composition/Information on Ingredients

Ingredient	_	CAS Number	<u>Percent</u>	<u>Hazardous</u>
sodium hypochlorite water	(NaOCI)	7681-52-9 7732-18-5	10% 90%	yes no

#### 3. Hazards Information

# **Emergency Overview**

WARNING, HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO EYES AND RESPIRATORY TRACT. CAUSES SUBSTANTIAL, BUT TEMPORARY EYE INJURY.

#### **Potential Health Effects**

**Inhalation:** May cause irritation to the nose, throat and respiratory tract. Symptoms may include coughing and sore throat.

Ingestion: May cause nausea, vomiting and upset stomach.

**Skin Contact:** May imitate intact skin. May cause severe imitation to mucus membranes and broken skin.

Eye Contact: Eye contact may cause severe irritation and damage, especially at higher concentrations.

Chronic Exposure: A constant irritant to the eyes and throat. Low potential for sensitization after exaggerated exposure to broken skin or mucus membranes.

**Aggravation of Pre-existing Conditions:** Persons with impaired respiratory function, or hearts disorders (or disease) may be more susceptible to the effects of hypochlorite solutions.

**Note to Physician:** Consider oral administration of sodium thiosulfate solutions if sodium hypochlorite is ingested. Do not administer neutralizing agents, exothermic reaction may result and cause further damage.

#### 4. First Aid Measures

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.

**Ingestion:** If swallowed DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Skin Contact:** In case of contact with liquid, immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Seek immediate medical attention.

Eye Contact: Immediately flush eyes with plenty of flowing water for at least 15 minutes, while lifting upper and lower eyelids. Seek immediate medical attention.

# 5. Fire Fighting Measures

NFPA ratings: Health 3 Flammability 0 Reactivity 0

Fire: Not considered to be a fire hazard. Releases oxygen when heated, causing increased severity of an existing fire.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Water or water spray to cool fire exposed containers. Use any means to extinguish surrounding fire.

**Special Information:** In the event of fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA), with full face shield, operated in positive pressure mode. Stay away from ends of tanks. Cool tanks and drums with water spray until well after fire is out.

#### 6. Accidental Release Measures

Adequately ventilate area of leak or spill. Wear appropriate personal protective equipment (PPE), as specified in Section 8. Isolate hazard area to keep unprotected personnel from entering. Stop the leak if possible. Contain and recover liquid when possible. Absorb spilled liquid with an inert material, such as vermiculite, sand, or earth and place recovered material in an approved, compatible chemical waste container. Do not use combustible materials such as cardboard or saw dust as an absorbent. Do not flush spilled liquid to the sewer. EPA regulations require reporting spills and releases to the soil, air and water, in excess of the reportable quantity (100 lbs of solution), to the National Response Center, telephone number 1-800-424-8802. Reporting to the State Emergency Response Commission (SERC) warning point and local authorities (911) is also required. Notify CHEMTREC, for specific information, in the event of any transportation related spills or leaks. (1-800-424-9300)

# 7. Handling and Storage

Store in a cool, dry, ventilated storage area with good drainage. Protect from physical damage. Keep out of sunlight, away from direct heat, water and incompatible materials. Do not wash out container and use it for other purposes. Empty containers may be hazardous since they retain product residues of liquid and vapor. Observe all warnings and precautions stated on the container label. Wear personal protective equipment when handling, opening containers and using hypochlorite solutions.

# 8. Exposure Control and Personal Protection

# Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL) NIOSH Relative Exposure Level (REL) ACGIH Threshold Limit Value (TLV)

NIOSH Immediately Dangerous Level (IDLH)

1 ppm (STEL) as chlorine

unavailable 3 ppm (STEL) as chlorine 1 ppm (TWA)

unavailable

0.5 ppm (TWA)

Ventilation: A system of local and/or general exhaust is recommended to keep exposure below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at it's source, preventing dispersion into occupied areas.

Personal Respirators (NIOSH Approved): If exposure limits are exceeded and engineering controls are not feasible, a full face respirator, with an acid gas cartridge, may be wom up to 50 times the permissible exposure limit (PEL). For emergencies or instances where the exposure levels are not known, use full face, positive pressure, air supplied respirator. WARNING, Air purifying respirators do not provide protection in oxygen deficient atmospheres.

Skin Protection: Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick drench facilities (safety shower) in work areas.

# 9. Physical and Chemical Properties

Appearance: Clear to yellowish liquid.

Odor: Bleach like odor.

**Solubility:** Infinitely soluble in water.

Specific Gravity: 1.15 - 1.16

Percent Volatile: >98%

Boiling Point: 180 °F decomposes slightly

Vapor Density: unavailable

Vapor Pressure: 17.5 @ 68 °F

Evaporation Rate: < 1 (butyl acetate = 1)

pH: > 10

# 10. Stability and Reactivity

Slowly decomposes on contact with air. Decomposition rate increases with Stability: concentration and temperature. Exposure to sunlight accelerates decomposition. Sodium hypochlorite solutions become less toxic with age.

Hazardous Decomposition Products: When heated to decomposition, emits toxic chlorine fumes and will react with water or steam to produce heat and toxic, corrosive fumes. Thermal decomposition results in the emission of chlorine oxides.

Hazardous Polymerization: Will not occur.

Incompatibilities: Ammonia (chloramines gas may evolve), amines, ammonium salts, acids, methanol, cellulose, reducing agents, oxidizable metals, and bisulfates.

# 11. Toxicological Information

Lethal ingested dose (LD50) in rats: 8.91 g/kg Not listed on the OSHA, NTP or IARC list of carcinogens.

#### 12. Ecological Information

Environmental Fate: Decomposes in air and light to release chlorine gas, oxygen and sodium chloride solution (salt water).

Environmental Toxicity: Highly toxic to aquatic organisms.

### 13. Disposal Considerations

Small leaks and spills may be flushed away with plenty of water. Whatever cannot be recovered or recycled should be handled as hazardous waste and sent to a RCRA approved waste facility. State and local disposal regulations may differ from federal regulations. Dispose of container and contents in accordance with federal, state and local laws.

# 14. Transport Information

Proper Shipping Name: 1.3 gallons, or less, may be reclassified in accordance with DOT regulation 49 CFR 173.154, as;

ORM-D, CONSUMER COMMODITY

Full Shipping Description: HYPOCHLORITE SOLUTIONS, 8, UN1791, PGIII (> 1.3 gal)

# 15. Regulatory Information

Regulated Ingredient: sodium hypochlorite (CAS # 7681-52-9)

CERCLA RQ: 100 lbs of solution TSCA Inventory Listed: No

SARA Title III, Section 302: Not listed TPQ: NA

SARA Title III, Section 312: Subject to Toxic Chemical Inventory Reporting

Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No

SARA Title III, Section 313: Not subject to Toxic Chemical Release Inventory Reporting

RCRA Hazardous Waste: Not a listed Hazardous Waste. May be Characteristic Hazardous

Waste, if pH is greater than 10.0

Clean Air Act: Not a Listed Hazardous Air Pollutant (HAP)

#### 16. Other Information

#### Label Hazard Warning:

WARNING, HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO EYES AND RESPIRATORY TRACT. CAUSES SUBSTANTIAL, BUT TEMPORARY EYE INJURY.

Label Precautions: Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or mist. Keep container dosed when not in use. Use with adequate ventilation. Wash thoroughly after handling. KEEP OUT OF REACH OF CHILDREN.

Label First Aid: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water, for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. SEEK MEDICAL ATTENTION.